

REMARKS

It is believed that this Amendment, in conjunction with the following remarks, place the application in immediate condition for allowance. Accordingly, entry of this Amendment and favorable consideration of the application are respectfully requested in view of the foregoing amendments and the following remarks. Claims 1-16 are pending in the application.

IDS

Applicant notes with appreciation the Examiner's consideration of, and making of record, the documents submitted with the Information Disclosure Statements filed on April 12, 2000. Applicant also notes the Examiner has not initialed the Kogure et al. document. Applicant has enclosed another copy of this document and respectfully requests the Examiner to acknowledge consideration of this document identified in the Information Disclosure Statement filed April 12, 2000 by initialing the PTO-1449 form for this document and returning a copy of the initialed form to the undersigned.

Drawings

Applicant has provided formal drawings in response to the Examiner's request.

35 U.S.C. § 102 & 103 Rejections

Claims 1-5 and 9-10 were rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by Sekiguchi et al. (U.S. Patent No. 5,764,658). Claims 6-8 were rejected

under 35 U.S.C. § 102(e) as allegedly being anticipated by Qian et al. (U.S. Patent No. 6,002,803 and Adolph et al. (U.S. Patent No. 5,825,430). Claims 1, 9-11, 14-15 and 16 were rejected under 35 U.S.C. § 103 (a) as allegedly being unpatentable over Sekiguchi in view of Brusewitz (U.S. Patent No. 6,038,257). Claims 6-8, 12 and 13 were rejected under 35 U.S.C. § 103 (a) as allegedly being unpatentable over Qian et al. (U.S. Patent No. 6,002,803) in view of Brusewitz (U.S. Patent No. 6,038,257).

Reply to Response to Arguments

Since the Examiner has maintained the prior rejections and has provided arguments in support of this position, Applicant will address the Examiner's response first.

According to Sekiguchi et al., it is possible to detect start codes for respective layers of a bit stream of a layered structure. However, what the Examiner identifies as the first header information in Sekiguchi et al. belongs to a different layer from that of the second header information. Accordingly, Sekiguchi et al. does not disclose decoding of the first and second header information including different start codes for the same layer.

Further, the Examiner seems to identify the setting means of the present invention as the start code detector 15 shown in Fig. 6 of Sekiguchi et al, as discussed in the previous Office Action. The start code detector 15 of Fig. 6 is disclosed as detecting a start code and outputting layer information and start code information to the header information analyzer (column 9 lines 31-49). Contrary to the Examiner's

statement, Sekiguchi fails to disclose the setting means for setting the image coding information (e.g., 234, 236 of Fig. 1(b) in the present application) on the second coding scheme in response to image coding information (e.g., 222 of Fig. 1(a) in the present application) on the first coding scheme included in the first header information.

Regarding the Qian et al. reference, the Examiner has characterized the individual shape, texture and motion encoders as being equivalent to encoding multiple coding schemes. However, this position is inconsistent with the disclosure of the Qian et al. reference. The Qian et al. reference discloses a multiple layer coding of the shape of a video object (VO). The Examiner seems to identify each layer as the header information (see, e.g., Fig. 5 and Fig. 6). However, the shape, texture and motion encoders are all used to code a single video object (VO), such as disclosed in Fig. 2 and the related disclosure. Accordingly, it is clear that the single VO is part of a single coding scheme.

Further, in accordance with the present invention, it is clear that the first and second coded bit streams are obtained by coding in different coding schemes and that the header information includes a start code and is not something that can be equated with shape information.

Regarding the Adolph et al. patent, the Examiner relied on Fig. 3, showing VE1 and VE2, as disclosing a first coding scheme and a second coding scheme. Again, contrary to the Examiner's conclusions, these encoders are part of a single coding scheme (e.g., MPEG-2) as noted in column 4, lines 33-44.

Clearly, both the Qian et al. and Adolph et al. systems described above teach one common coding scheme for the various encoders used in the described embodiments. Accordingly, at least the first and second coding schemes feature of Applicants' claimed combinations is not disclose or suggest, as alleged by the Examiner.

In an attempt to expedite allowance of the present application, Applicant has amended the claims to further distinguish of the applied references as described above.

As stated in MPEP § 2131, "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ...claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The references applied by the Examiner neither expressly nor inherently describes every feature of Applicants' claimed combinations as detailed in the foregoing arguments. Therefore, Applicants respectfully submit that the applied references do not anticipate Applicants' claimed combinations as alleged by the Examiner.

Regarding the Brusewitz et al. reference, the Examiner uses this reference to allegedly render obvious the inclusion of the two coding schemes including MPEG-4 and H.263. Particularly, the Examiner relies on the section recited below in column 4, lines 15-30.

As discussed, the aforedescribed compression technologies employ various techniques to condense the image information. The decoder 24 is configured to interpret the format and operating parameters by which the image information was encoded by encoder 16. As is understood in the art, much of the decoding process performed within the decoder 24 may be called "normative", i.e., fixed by the particular standard, e.g., MPEG. Consequently, the decoder 24 recognizes these normative parts of a signal from encoder 16, i.e., how to interpret the transmitted bits in the bit stream. It should, therefore, be understood that the decoder 24 must be able to understand the particular video format used, e.g., the aforementioned ITU-R/601 or other standard, and the various compression algorithm standards, e.g., ISO/IEC MPEG-1, MPEG-2, and the upcoming MPEG-4, and ITU-T H.261, H.262 and H.263, i.e., the normative parts.

However, as disclosed above, it is clear that the Brusewitz et al. reference actually discloses that the coding schemes are independent and that the decoder has to be configured to interpret the "normative" part of a single coding scheme. Accordingly, neither the Examiner's interpretation of the Brusewitz et al. reference nor its application to claims 11-16 is correct. Further, Applicant respectfully submits that the Brusewitz et al. reference does not cure the deficiencies in the Sekiguchi et al. and Qian et al. references as noted above. Therefore, Applicant respectfully requests reconsideration and withdrawal of these rejections.

SUMMARY

For at least the foregoing reasons and the reasons set forth in Applicant's response of July 29, 2002, it is respectfully submitted that claims 1, 6, 8-11 and 16 are distinguishable over the applied art. The remaining dependent claims are allowable at least by virtue of their dependency on the above-identified independent claims. See MPEP § 2143.01. Moreover, these claims recite additional subject matter, which is not suggested by the documents taken either alone or in combination.

CONCLUSION

All objections and rejections raised in the Office Action having been addressed, it is respectfully submitted that the present application is in condition for allowance and such allowance is respectfully solicited. Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Mark E. Olds, Reg. No. 46,570, at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

Attached hereto is a marked-up version of the changes made to the application by this Response.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No.

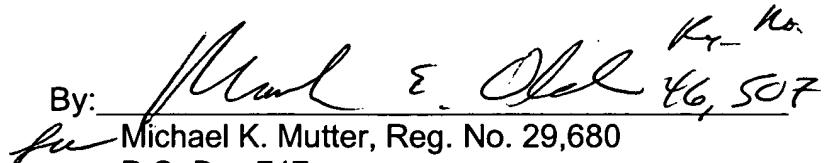
Appln. No. 09/09/529,304

02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1. 17; particularly, extension of time fees.

Respectfully submitted,

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Attachment: Version with Markings to Show Changes Made

VERSION WITH MARKINGS TO SHOW CHANGES MADE

1. (Amended) An image decoding apparatus for decoding a first coded bit stream into which first header information including a start code of a first kind and image coded data encoded in a first coding scheme are multiplexed, or for decoding a second coded bit stream into which second header information including, in the same layer as the start code of the first kind, a start code of a second kind different from the first kind and image coded data encoded in a second coding scheme are multiplexed, said image decoding apparatus comprising:

coding scheme decision means for making a decision as to whether a received coded bit stream is the first coded bit stream or the second coded bit stream in response to the first header information or to the second header information;

decoding means for decoding image coding information on the second coding scheme included in the second header information by receiving the second coded bit stream; and

setting means for setting, by receiving the first coded bit stream, the image coding information on the second coding scheme in response to image coding information on the first coding scheme included in the first header information,

wherein said image decoding apparatus decodes the image coded data included in the first coded bit stream or in the second coded bit stream in response to the image coding information set by said setting means or in response to the image coding information decoded by said decoding means.

6. (Amended) An image coding apparatus comprising:

coding means for generating a first coded bit stream by encoding an image signal in a first coding scheme; and

header information multiplexing means for multiplexing, into the first coded bit stream, first header information for ensuring compatibility with a second coded bit stream encoded in a second coding scheme, the first header information including a start code of a first kind, and second header information of the second coded bit stream including, in the same layer as the start code of the first kind, a start code of a second kind different from the first kind.

8. (Amended) An image communications system comprising:

coding means for generating a first coded bit stream by encoding an image signal in a first coding scheme;

decoding means for decoding a second coded bit stream coded in a second coding scheme; and

coded bit stream converting means for transmitting the first coded bit stream received from said coding means to said decoding means, after multiplexing into the first coded bit stream first header information for ensuring compatibility, which is received from said decoding means, the first header information including a start code of a first kind, and second header information of the second coded bit stream including, in the same layer as the start code of the first kind, a start code of a second kind different from the first kind.

9. (Amended) A coded bit stream converting apparatus comprising:

syntax analyzing means for inputting a first coded bit stream generated in a first coding scheme, and for extracting first header information in the first coding scheme and image coded data;

decoding means for decoding the first header information extracted;

header information setting means for setting and coding second header information in a second coding scheme in response to the first header information decoded by said decoding means, the first header information including a start code of a first kind, and the second header information including, in the same layer as the start code of the first kind, a start code of a second kind different from the first kind; and

multiplexing means for generating a second coded bit stream by multiplexing image coded data extracted by said syntax analyzing means with the second header information coded by said header information setting means.

10. (Amended) An image decoding apparatus for decoding a first coded bit stream into which first header information including a start code of a first kind and image coded data encoded in a first coding scheme are multiplexed, or for decoding a second coded bit stream into which second header information including, in the same layer as the start code of the first kind, a start code of a second kind different from the

first kind and image coded data encoded in a second coding scheme are multiplexed,
said image decoding apparatus comprising:

coding scheme decision means for making a decision as to whether a received
coded bit stream is the first coded bit stream or the second coded bit stream in
response to the first header information or to the second header information;

first decoding means for decoding the first header information by receiving the
first coded bit stream; and

second decoding means for decoding image coding information on the second
coding scheme included in the second header information by receiving the second
coded bit stream,

wherein said image decoding apparatus decodes, when the coded bit stream
received is the first coded bit stream, the image coded data included in the first coded
bit stream in response to the first header information decoded by said first decoding
means, and decodes, when the coded bit stream received is the second coded bit
stream, the image coded data included in the second coded bit stream in response to
the image coding information decoded by said second decoding means.

11. (Amended) ~~The image decoding apparatus according to claim 1, wherein the
first coding scheme is the H.263 standard and the second coding scheme is MPEG-4.~~

An image decoding apparatus for decoding a first coded bit stream into which
first header information including a start code specific to the H.263 coding scheme and
image coded data encoded in the H.263 coding scheme are multiplexed, or for

decoding a second coded bit stream into which second header information including a start code specific to the MPEG-4 coding scheme and image coded data encoded in the MPEG-4 coding scheme are multiplexed, said image decoding apparatus comprising:

coding scheme decision means for making a decision as to whether a received coded bit stream is the first coded bit stream or the second coded bit stream in response to the first header information or to the second header information;

decoding means for decoding image coding information on the MPEG-4 coding scheme included in the second header information by receiving the second coded bit stream; and

setting means for setting, by receiving the first coded bit stream, the image coding information on the MPEG-4 coding scheme included in the first header information,

wherein said image decoding apparatus decodes the image coded data included in the first coded bit stream or in the second coded bit stream in response to the image coding information set by said setting means or in response to the image coding information decoded by said decoding means.